

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Draft

**Title V
AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Tennessee Valley Authority
Mailing Address: 1101 Market Street, Chattanooga, TN 37402

Source Name: Paradise Fossil Plant
Mailing Address: 13246 State Route 176, Suite 10 Drakesboro, KY 42337

Source Location: 13246 State Route 176, Suite 10 Drakesboro, KY 42337

Permit Number: V-04-024
Log Number: 50068
Review Type: Operating
Source ID #: 21-177-00006
Oris Code: 1378
SIC Code: 4911

Regional Office: Owensboro Regional Office
3032 Alvey Park Dr. W.
STE 700
Owensboro, KY 42303
(859) 292-6411

County: Muhlenberg

**Application
Complete Date:** February 7, 1997
Issuance Date:
Revision Date:
Expiration Date:

**John S. Lyons, Director
Division for Air Quality**

TABLE OF CONTENTS

SECTION	DATE OF ISSUANCE	PAGE
A. PERMIT AUTHORIZATION		1
B. EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS		2
C. INSIGNIFICANT ACTIVITIES		29
D. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS		32
E. SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS		33
F. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS		34
G. GENERAL PROVISIONS		37
H. ALTERNATE OPERATING SCENARIOS		43
I. COMPLIANCE SCHEDULE		44
J. ACID RAIN		45
K. NO _x BUDGET PERMIT		50

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

COMB1 (01)

Boiler Unit 1

Description:

Coal Fired Indirect Heat Exchanger

Maximum continuous rating: 6959 mmBtu/hour

Construction commenced: 1963

Controls: Selective Catalytic Reduction, Venturi Type Flue Gas Desulfurization Scrubber

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers applicable to an emissions unit with a capacity of more than 250 mmBtu/hour, which commenced construction before August 17, 1971.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 61:015, Section 4(1), particulate matter emissions shall not exceed 0.11 lb/mmBtu based on a three-hour average.
- b) Pursuant to 53 FR 30998, Approval and Promulgation of Implementation Plans; Kentucky; Opacity Variance for TVA's Paradise Steam Plant, visible emissions shall not exceed 61% opacity.
- c) Pursuant to 54 FR 35326, Approval and Promulgation of Implementation Plans for Kentucky; Redistribution of allowable sulfur dioxide emissions at TVA's Paradise Steam Plant, sulfur dioxide emissions shall not exceed 1.2 lb/mmBtu based on a twenty-four-hour average.

3. Testing Requirements:

- a) The permittee shall perform quarterly stack tests in order to demonstrate compliance with the particulate matter emission limitation.

4. Specific Monitoring Requirements:

- a) Pursuant to 401 KAR 61:015, Section 6, the rate of fuel burned shall be monitored daily.
- b) Pursuant to 401 KAR 61:015, Section 6, the heating value, ash content, and sulfur content of the coal to be burned shall be ascertained once per week. The permittee may use fuel supplier certification to meet this requirement.
- c) Pursuant to 401 KAR 61:015, Section 6, the average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,

AND OPERATING CONDITIONS (CONTINUED)

- d) Pursuant to 401 KAR 61:005, Section 3 and material incorporated by reference by 401 KAR 52:020, Section 10, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. The continuous emission monitoring systems shall comply with 401 KAR 61:005, Section 3, particularly, performance specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A.
- e) Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and make any necessary repairs or take corrective actions on pollution control equipment and/or the CEM system as soon as practicable.
- f) See Section G(a)18.
- g) The permittee shall monitor and record the following operating parameters at least once per shift:
 - 1. Flow rate of make-up scrubbing liquor. Pump amperage for each pump can be used as surrogate for flow rate.
 - 2. Pressure drop across each scrubber module.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division.

- a) Owners or operators of facilities required to install continuous monitoring systems or those utilizing fuel sampling and analysis for sulfur dioxide emissions shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting shall correspond to the emission standard averaging period of twenty-four (24) hours. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.
- b) For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.
- c) Except for zero and span checks, the date and time identifying each period during which the continuous monitoring system was inoperative and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. **Specific Control Equipment Operating Conditions:**

- a) The control equipment in the description above shall be continuously operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices.
- b) Records regarding the maintenance of the control equipments shall be maintained.
- c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

COMB2 (02)

Boiler Unit 2

Description:

Coal Fired Indirect Heat Exchanger

Maximum continuous rating: 6959 mmBtu/hour

Construction commenced: 1963

Controls: Selective Catalytic Reduction, Venturi Type Flue Gas Desulfurization Scrubber

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers applicable to an emissions unit with a capacity of more than 250 mmBtu/hour, which commenced construction before August 17, 1971.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 61:015, Section 4(1), particulate matter emissions shall not exceed 0.11 lb/mmBtu based on a three-hour average.
- b) Pursuant to 53 FR 30998, Approval and Promulgation of Implementation Plans; Kentucky; Opacity Variance for TVA's Paradise Steam Plant, visible emissions shall not exceed 50% opacity.
- c) Pursuant to 54 FR 35326, Approval and Promulgation of Implementation Plans for Kentucky; Redistribution of allowable sulfur dioxide emissions at TVA's Paradise Steam Plant, sulfur dioxide emissions shall not exceed 1.2 lb/mmBtu based on a twenty-four-hour average.

3. Testing Requirements:

- a) The permittee shall perform quarterly stack tests in order to demonstrate compliance with the particulate matter emission limitation.

4. Specific Monitoring Requirements:

- a) Pursuant to 401 KAR 61:015 Section 6, the rate of fuel burned shall be monitored daily.
- b) Pursuant to 401 KAR 61:015, Section 6, the heating value, ash content, and sulfur content of the coal to be burned shall be ascertained once per week. The permittee may use fuel supplier certification to meet this requirement.
- c) Pursuant to 401 KAR 61:015, Section 6, the average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,

AND OPERATING CONDITIONS (CONTINUED)

- d) Pursuant to 401 KAR 61:005, Section 3 and material incorporated by reference by 401 KAR 52:020, Section 10, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. The continuous emission monitoring systems shall comply with 401 KAR 61:005, Section 3, particularly, performance specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A.
- e) Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and make any necessary repairs or take corrective actions on pollution control equipment and/or the CEM system as soon as practicable.
- f) See Section G(a)18.
- g) The permittee shall monitor and record the following operating parameters at least once per shift:
 - 1. Flow rate of make-up scrubbing liquor. Pump amperage for each pump can be used as surrogate for flow rate.
 - 2. Pressure drop across each scrubber module.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

Pursuant to 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division.

- a) Owners or operators of facilities required to install continuous monitoring systems or those utilizing fuel sampling and analysis for sulfur dioxide emissions shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting shall correspond to the emission standard averaging period of twenty-four (24) hours. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.
- b) For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.
- c) Except for zero and span checks, the date and time identifying each period during which the continuous monitoring system was inoperative, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. **Specific Control Equipment Operating Conditions:**

- a) The control equipment in the description above shall be continuously operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices.
- b) Records regarding the maintenance of the control equipments cyclones shall be maintained.
- c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

COMB03 (03)

Boiler Unit 3

Description:

Coal Fired Indirect Heat Exchanger

Maximum continuous rating: 11,457 mmBtu/hour

Construction commenced: 1970

Controls: Selective Catalytic Reduction, Venturi Type Flue Gas Desulfurization Scrubber (under construction, 2006)

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers applicable to an emissions unit with a capacity of more than 250 mmBtu/hour, which commenced construction before August 17, 1971.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 61:015, Section 4(1), particulate matter emissions shall not exceed 0.11 lb/mmBtu based on a three-hour average.
- b) Pursuant to 401 KAR 61:015, Section 4(2), visible emissions shall not exceed 20% opacity.
- c) Pursuant to 54 FR 35326, Approval and Promulgation of Implementation Plans for Kentucky; Redistribution of allowable sulfur dioxide emissions at TVA's Paradise Steam Plant, sulfur dioxide emissions shall not exceed 5.4 lb/mmBtu based on a twenty-four hour average.

3. Testing Requirements:

- a) The permittee shall submit, within six months from the issuance date of the proposed permit, a schedule to conduct at least one performance test for particulate within one year following the issuance of this permit. Opacity data from the Continuous Opacity Monitor (COM) obtained during the performance test shall be correlated with the particulate emission rate to establish an average opacity level pursuant to Condition 4.f below.
- b) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 as required by the Division.

4. Specific Monitoring Requirements:

- a) Pursuant to 401 KAR 61:015, Section 6, the rate of fuel burned shall be monitored daily.
- b) Pursuant to 401 KAR 61:015, Section 6, the heating value, ash content, and sulfur content of the coal to be burned shall be ascertained once per week. The permittee may use fuel supplier certification to meet this requirement.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c) Pursuant to 401 KAR 61:015, Section 6, the average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.
- d) Pursuant to 401 KAR 61:005, Section 3 and material incorporated by reference by 401 KAR 52:020, Section 10, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. The continuous emission monitoring systems shall comply with 401 KAR 61:005, Section 3, particularly, performance specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A.
- e) Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.
- f) Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). The average opacity level, determined pursuant to condition 3.a above, plus 5% opacity, will become the opacity trigger level. Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity (averaged over a period of three hours) value exceeds the opacity trigger level the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over a six minute period) recorded in a calendar quarter show excursions above the opacity trigger level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G (a)(17) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.
- g) Pursuant to material incorporated by reference by 401 KAR 52:020, Section 10, to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or COM system and make any necessary repairs. If an excursion is recorded by the COM, then opacity must be determined using Reference Method 9 or by accepting the concurrent readout from the COM, and the permittee shall perform an inspection of the control equipment and make any necessary repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.
- h) Pursuant to 401 KAR 61:005, Section 3, a continuous monitoring system for opacity shall conform to requirements of this section which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrating compliance with the applicable Performance Specification 1 of 40 CFR 60, Appendix B.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,

AND OPERATING CONDITIONS (CONTINUED)

- i) The permittee shall monitor and record the following operating parameters at least once per shift:
 - 1. Flow rate of make-up scrubbing liquor. Pump amperage for each pump can be used as a surrogate for flow rate.
 - 2. Pressure drop across each scrubber module.

5. Specific Recordkeeping Requirements:

- a) Records shall be kept in accordance with 401 KAR 61:005, Section 3(16) (f) and 61:015, Section 6, with the exception that the records shall be maintained for a period of five (5) years. Percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter shall be computed and recorded.
- b) The permittee shall maintain records of the COM data on a three-hour rolling average basis, the number of excursions above the trigger level, time and date of excursions, opacity value of the excursions, and percentage of the COM data showing excursions from the indicator range in each calendar quarter.
- c) See Section F.

6. Specific Reporting Requirements:

- a) Pursuant to 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division.
 - 1. Owners or operators of facilities required to install continuous monitoring systems or those utilizing fuel sampling and analysis for sulfur dioxide emissions shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting shall correspond to the emission standard averaging period of twenty-four (24) hour. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.
 - 2. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.
 - 3. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.
 - 4. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.
- b) The permittee shall report the number of excursions (excluding startup, shut down, or malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. **Specific Control Equipment Operating Conditions:**

- a) The control equipment in the description above shall be continuously operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices.
- b) Records regarding the maintenance of the control equipment shall be maintained.
- c) See Section E for further requirements.

COMB4 (26)

Unit 1 Building Heat Boiler and Unit 2 Building Heat Boiler

Description:

Indirect Heat Exchanger

Maximum continuous rating: 25.8 mmBtu/hour each

Construction commenced: 1963

Fuel: #2 fuel oil

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers applicable to an emissions unit with a capacity of less than 250 mmBtu/hour, which commenced construction before April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 61:015, Section 4(1), particulate matter emissions shall not exceed 0.11 lb/mmBtu based on a three-hour average.
- b) Pursuant to 401 KAR 61:015, Section 4(2), visible emissions shall not exceed 20% opacity.
- c) Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emissions shall not exceed 2.1 lb/mmBtu based on a twenty four-hour average.

Compliance Demonstration Method:

Based on AP-42 emission factors, compliance with PM and SO₂ limits is assured by burning fuel oil containing no more than .5% sulfur. If higher sulfur fuel oil is burned, the Division may require a stack test.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) Pursuant to 401 KAR 61:015, Section 6, the rate of fuel burned shall be monitored daily.
- b) Pursuant to 401 KAR 61:015, Section 6, the heating value and sulfur content shall be ascertained once per week. The permittee may use fuel supplier certification to meet this requirement.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

COMB5 (28)

Unit 3 Building Heat Boiler

Description:

Indirect Heat Exchanger

Maximum continuous rating: 25.8 mmBtu/hour each

Construction commenced: 1970

Fuel: #2 fuel oil

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers applicable to an emissions unit with a capacity of less than 250 mmBtu/hour, which commenced construction before April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 61:015, Section 4(1), particulate matter emissions shall not exceed 0.11 lb/mmBtu based on a three-hour average.
- b) Pursuant to 401 KAR 61:015, Section 4(2), visible emissions shall not exceed 20% opacity.
- c) Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emissions shall not exceed 2.1 lb/mmBtu based on a twenty four-hour average.

Compliance Demonstration Method:

Based on AP-42 emission factors, compliance with PM and SO₂ limits is assured by burning fuel oil containing no more than .5% sulfur. If higher sulfur fuel oil is burned, the Division may require a stack test.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) Pursuant to 401 KAR 61:015, Section 6, the rate of fuel burned shall be monitored daily.
- b) Pursuant to 401 KAR 61:015, Section 6, the heating value and sulfur content shall be ascertained once per week. The permittee may use fuel supplier certification to meet this requirement.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EQPT22 (29a)

Eight Dravo Heaters

Description:

Indirect Heat Exchanger

Maximum continuous rating: 2.5 mmBtu/hour each

Construction commenced: 1970

Fuel: #2 fuel oil

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers applicable to an emissions unit with a capacity of less than 250 mmBtu/hour, which commenced construction before April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 59:015, Section 4(1), particulate matter emissions shall not exceed 0.11 lb/mmBtu based on a three hour-average.
- b) Pursuant to 401 KAR 59:015, Section 4(2), visible emissions shall not exceed 20% opacity.
- c) Pursuant to 401 KAR 59:015, Section 5(1), sulfur dioxide emissions shall not exceed 3.1 lb/mmBtu based on a twenty four-hour average.

Compliance Demonstration Method:

Based on AP-42 emission factors, compliance with PM and SO₂ limits is assured by burning fuel oil containing no more than .5% sulfur. If higher sulfur fuel oil is burned, the Division may require a stack test.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) The rate of fuel burned shall be monitored daily.
- b) The heating value and sulfur content shall be ascertained once per week. The permittee may use fuel supplier certification to meet this requirement.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EQPT36 (29b)

Three Dravo Heaters

Description:

Indirect Heat Exchanger

Maximum continuous rating: 2.5 mmBtu/hour each

Construction commenced: 1981

Fuel: #2 fuel oil

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect heat exchangers applicable to an emissions unit with a capacity of less than 250 mmBtu/hour, which commenced construction on or after April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 59:015, Section 4(1), particulate matter emissions shall not exceed 0.1 lb/mmBtu based on a three hour-average.
- b) Pursuant to 401 KAR 59:015, Section 4(2), visible emissions shall not exceed 20% opacity.
- c) Pursuant to 401 KAR 59:015, Section 5(1), sulfur dioxide emissions shall not exceed 0.8 lb/mmBtu based on a twenty four-hour average.

Compliance Demonstration Method:

Based on AP-42 emission factors, compliance with PM and SO₂ limits is assured by burning fuel oil containing no more than .5% sulfur. If higher sulfur fuel oil is burned, the Division may require a stack test.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) The rate of fuel burned shall be monitored daily.
- b) The heating value and sulfur content shall be ascertained once per week. The permittee may use fuel supplier certification to meet this requirement.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GACT4**Existing Coal Handling Processes****Description:**

EQPT13 (16)	Three Coal Breakers and Five Conditioners	2000 tons/hr; 17,000,000 tons/yr
EQPT14 (17)	Coal Conveying and Bunker Room	2000 tons/hr; 17,000,000 tons/yr

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to 401 KAR 61:020, Section 2, particulate matter emissions shall not exceed 86.9 lb/hr.

b) Pursuant to 401 KAR 61:020, Section 2, visible emissions shall not exceed 40% opacity.

Compliance will be assumed while processes are enclosed and foam suppression is utilized properly.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The amount of coal processed shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The enclosure shall be maintained and the foam suppression system shall be continuously operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices.

b) Records regarding the maintenance of the enclosure and foam suppression system shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

GACT6**Existing Coal Handling Fugitives****Description:**

EQPT12 (15)	Receiving and Reclaim Hoppers	3000tons/hr; 17,000,000tons/yr
STOR1 (18)	Live Storage Silo #1 and 2	2000tons/hr; 17,000,000tons/yr

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 63:010, Section 3, no person shall cause, suffer, or allow any material to be handled, processed, or transported without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precautions shall include installation of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The amount of coal processed shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS (CONTINUED)**

EQPT15 (19)

Two Lime Storage Silos

Description:

Storage of pebble quicklime to regulate pH of ash pond and metal-cleaning waste treatment facility.

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations.

1. Operating Limitations:

Each unit shall have maximum processing rates of 5 tons/hr and 350 tons/yr each.

2. Emission Limitations:

a) Pursuant to 401 KAR 59:010, Section 3, particulate matter emissions shall not exceed 9.74 lb/hr each.

b) Pursuant to 401 KAR 59:010, Section 3, visible emissions shall not exceed 20% opacity.

Compliance will be assumed when bagfilters are operated and maintained properly.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The amount of lime processed shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The bagfilters shall be continuously operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices.

b) Records regarding the maintenance of the bagfilters shall be maintained.

c) See Section E for further requirements.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS (CONTINUED)**

Description:

EQPT1 (04)	Transfer Station A	2000 tons/hr; 13,000,000tons/yr
EQPT2 (05)	Transfer Station B	2000 tons/hr; 6,500,000tons/yr
EQPT3 (06)	Transfer Station G	2000 tons/hr; 13,000,000tons/yr
EQPT4 (07)	Transfer Station H	4000 tons/hr; 13,000,000tons/yr
EQPT5 (08)	Coal Storage Silo 5	2000 tons/hr; 6,500,000tons/yr
EQPT6 (09)	Coal Storage Silo 6	2000 tons/hr; 6,500,000tons/yr
EQPT7 (10)	Transfer Station J	2000 tons/hr; 13,000,000tons/yr
EQPT8 (11)	Coal Reclaim Hopper	2000 tons/hr; 6,500,000tons/yr
EQPT9 (12)	Transfer Station K	2000 tons/hr; 13,000,000tons/yr
EQPT10 (13)	Transfer Station M	1800 tons/hr; 13,000,000tons/yr
EQPT11 (14)	Transfer Station L	1800 tons/hr; 13,000,000tons/yr

APPLICABLE REGULATIONS:

401 KAR 60:005, Incorporating by reference 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants.

1. Operating Limitations:

None

2. Emission Limitations:

a) To preclude the applicability of 51:017, Prevention of significant deterioration of air quality, total emissions of particulate matter from this group shall not equal or exceed 100lb/hr, 1000lb/day, and 50 tons/yr.

b) Pursuant to 401 KAR 60:005, Incorporating by reference 40 CFR 60, Subpart Y, visible emissions shall not equal or exceed 20% opacity.

c) Unit specific limits:

EQPT1	Transfer Station A	0.45 lb/hr; 1.48tons/yr
EQPT2	Transfer Station B	7.02 lb/hr; 11.41tons/yr
EQPT3	Transfer Station G	0.31 lb/hr; 1.02tons/yr
EQPT4	Transfer Station H	0.31 lb/hr; 1.02tons/yr
EQPT5	Coal Storage Silo 5	0.45 lb/hr; 0.74tons/yr
EQPT6	Coal Storage Silo 6	0.22 lb/hr; 0.36tons/yr
EQPT7	Transfer Station J	0.27 lb/hr; 0.88tons/yr
EQPT8	Coal Reclaim Hopper	0.27 lb/hr; 0.44tons/yr
EQPT9	Transfer Station K	0.27 lb/hr; 0.88tons/yr
EQPT10	Transfer Station M	0.24 lb/hr; 0.88tons/yr
EQPT11	Transfer Station L	1.58 lb/hr; 5.7tons/yr

Compliance will be assumed while processes are enclosed and foam suppression is utilized properly.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) The amount of coal processed shall be monitored on a monthly basis.
- b) The hours of operation shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a) The enclosure shall be maintained and the foam suppression system shall be continuously operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices.
- b) Records regarding the maintenance of the enclosure and foam suppression system shall be maintained.
- c) See Section E for further requirements.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS (CONTINUED)**

Description:

EQPT17 (21)	Conveying Transfer Point	900tons/hr; 919,800tons/yr
EQPT19 (23)	Silo Loading	900tons/hr; 919,800tons/hr
EQPT21 (25)	Surge Hopper and Weigh Hopper	240tons/hr; 919,800tons/yr

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 59:010, Section 3, particulate matter emissions from the conveying transfer point, silo loading, and surge hopper and weigh hopper shall not exceed 51.4 lb/hr, 51.4 lb/hr, and 41.6 lb/hr respectively based on a three-hour average.
- b) Pursuant to 401 KAR 59:010, Section 3, visible emissions shall not exceed 20% opacity.

Compliance will be assumed while bagfilters are utilized properly.

- c) See Section D(3).

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The amount of limestone processed shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

- a) The bagfilters shall be continuously operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices.
- b) Records regarding the maintenance of the bagfilters shall be maintained.
- c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**GACT8 Limestone Handling Fugitives****Description:**

EQPT16	Limestone Receiving	900 tons/hr; 919,800 tons/yr
EQPT18	Limestone Stock-out and Storage	900 tons/hr; 919,800 tons/yr
EQPT20	Limestone Silo Unloading	240 tons/hr; 919,800 tons/yr

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 63:010, Section 3, no person shall cause, suffer, or allow any material to be handled, processed, or transported without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precaution shall include installation of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.
- c) See Section D(3).

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

- a) The amount of limestone processed shall be monitored on a monthly basis.
- b) The hours of operation shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EQPT23 (30)

Ash Handling System

Description:

Ash/Slag Reclaim from Slag Pond

Ash/Slag Reclaim from Dewatering Area

Ash/Slag Onsite Hauling

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions.

1. Operating Limitations:

Each unit shall have a maximum processing rate of 200 tons/hr.

2. Emission Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, no person shall cause, suffer, or allow any material to be handled, processed, or transported without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precaution shall include installation of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

a) The amount of ash/slag processed shall be monitored on a monthly basis.

b) The hours of operation shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,

AND OPERATING CONDITIONS (CONTINUED)

EQPT30 (42)

Gypsum Handling

Description:

Rim ditch formation

Open drying of gypsum

Excavation and transport of gypsum

Soil cover transport

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions.

1. Operating Limitations:

Each unit shall have a maximum processing rate of 108 tons/hr.

2. Emission Limitations:

a) Pursuant to 401 KAR 63:010, Section 3, no person shall cause, suffer, or allow any material to be handled, processed, or transported without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precaution shall include installation of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.

b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

a) The amount of gypsum processed shall be monitored on a monthly basis.

b) The hours of operation shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,

AND OPERATING CONDITIONS (CONTINUED)**GACT9 Coal Processing****Description:**

EQPT27	Coal Conveyor	2000 tons/hr
EQPT25	Coal Stock out Conveyor	2000 tons/hr; 1,250,000 tons/yr
EQPT29	Transfer Station Q	2640 tons/hr
	BC 59 to Conditioner Surge Bin	2640 tons/hr
	Transfer to Crushers	2640 tons/hr
	Conditioners #5 and 6	1320 tons/hr

APPLICABLE REGULATIONS:

401 KAR 60:005, Incorporating by reference 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants.

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to 401 KAR 60:005, Incorporating by reference 40 CFR 60, Subpart Y, visible emissions shall not equal or exceed 20% opacity.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

a) The permittee shall perform visual observations of the units on a weekly basis. If visible emissions are seen the permittee shall determine opacity in accordance with EPA Reference method 9.

b) The amount of coal processed shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

a) The permittee shall keep a log of all weekly visual observations, any Method 9 tests performed, and any corrective actions taken.

b) See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,

AND OPERATING CONDITIONS (CONTINUED)**GACT10 Unit 3 Limestone Handling (under construction)****Description:**

EQPT33 (75)	Unit 3 Limestone Storage Silo	900 tons/hr
EQPT34 (76)	Unit 3 Limestone Prep Building	600 tons/hr
Control equipment: Bin vent/baghouses		

APPLICABLE REGULATIONS:

401 KAR 60:670, Incorporating by reference 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.

1. Operating Limitations:

EQPT33 (75)	Unit 3 Limestone Storage Silo	900 tons/hr
EQPT34 (76)	Unit 3 Limestone Prep Building	600 tons/hr

2. Emission Limitations:

- a) Pursuant to 401 KAR 60:670, specifically 40 CFR 672(a)(1), particulate matter stack emissions shall not exceed 0.05 g/dscm.
- b) Pursuant to 401 KAR 60:670, specifically 40 CFR 672(a)(2), visible stack emissions shall not equal or exceed 7% opacity.
- c) Pursuant to 401 KAR 60:670, specifically 40 CFR 672(b), visible fugitive emissions shall not equal or exceed 10% opacity.

Compliance Demonstration Method:

Compliance is assumed when the baghouses and bin vents are operated continuously and maintained in accordance with manufacturer's recommendations.

3. Testing Requirements:

Pursuant to 401 KAR 60:670, specifically 40 CFR 60.675(b)(1), the permittee shall use EPA Reference Method 5 or 17 to determine initial compliance with the particulate matter concentration emission limit.

4. Specific Monitoring Requirements:

- a) The permittee shall perform qualitative visual observations of the opacity of emissions from each emission point on a weekly basis and maintain a log of the observations. If visible emissions are seen, then the permittee shall determine the opacity of emissions by EPA Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.
- b) The amount of limestone processed shall be monitored on a monthly basis.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS,

AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

- c) The permittee shall keep a log of all weekly visual observations, any Method 9 tests performed, and any corrective actions taken.
- d) See Section F.

6. Specific Reporting Requirements:

- a) The permittee shall submit the log required under 5. Specific Recordkeeping Requirements semi-annually.
- b) See Section F.

7. Specific Control Equipment Operating Conditions:

- a) The baghouses and bin vent shall be continuously operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices.
- b) Records regarding the maintenance of the baghouses and bin vent shall be maintained.
- c) See Section E for further requirements.

AND OPERATING CONDITIONS (CONTINUED)**GACT11 Unit 3 Limestone Handling Fugitives (under construction)****Description:**

EQPT31 (73)	Unit 3 Limestone Rail/Truck Unloading	900 tons/hr
EQPT32 (74)	Unit 3 Limestone Reclaim Receiving Hopper	900 tons/hr
EQPT35 (77)	Unit 3 contribution to Limestone Bulk Storage Pile	900 tons/hr

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 63:010, Section 3, no person shall cause, suffer, or allow any material to be handled, processed, or transported without taking reasonable precaution to prevent particulate matter from becoming airborne. Such reasonable precaution shall include installation of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b) Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

The amount of limestone processed shall be monitored on a monthly basis.

5. Specific Recordkeeping Requirements:

See Section F.

6. Specific Reporting Requirements:

See Section F.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. Process and emission control equipment at each insignificant activity subject to a general applicable regulation shall be inspected monthly and qualitative visible emission evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause and any conservative actions taken for any abnormal visible emissions.

<u>Description</u>	<u>Generally Applicable Regulation</u>
Unit 1 and 2 Powerhouse	
1. Units 1 and 2 Coal Bunker	401 KAR 63:010
2. Hydrogen Dump Vent	NA
3. Clean and Dirty Lube Oil Tanks	NA
4. Turbogenerator Lube Oil System Tanks	NA
5. Boiler Feed water Pump Turbine Lube Oil Tank	NA
Unit 3 Powerhouse	
6. High-pressure H ₂ Seal Oil Vent	NA
7. Low-pressure H ₂ Seal Oil Vent	NA
8. Titration and Mercury Room Exhaust	NA
9. Emergency Diesel Generator Sump Pump	NA
10. Clean and Dirty Lube Oil Tanks	NA
11. Turbogenerator Lube Oil System Tanks	NA
12. BFPT Lube Oil Tanks	401 KAR 63:010
13. Forced-Draft Fan Turbine Lube Oil Tanks	401 KAR 63:010
14. East and West Coal Bunker	401 KAR 61:020
Precipitator Area	
15. Hydroveyor Air Separator Tank Vents	NA
16. Induced-Draft Fan Lube Oil Tank	NA

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

<u>Description</u>	<u>Generally Applicable Regulation</u>
Scrubber Area	
17. Scrubber Chemistry Lab Hood	NA
18. Units 1 and 2 ID Fan Lube Oil Tank Vent	NA
Coal Handling Process	
19. Railcar Unloader	401 KAR 63:010
20. Coal Breaker No. 1 and 2 Refuse Disposal	401 KAR 63:010
21. Coal Breaker No. 3 Refuse Disposal	401 KAR 63:010
22. Foam Suppression Chemical Storage	401 KAR 63:010
23. Existing R.R. Car #1 Dump Hopper	401 KAR 63:010
Coal Wash Plant	
24. Process Fuel Oil Storage	NA
25. Fuel Oil Reagents Tanks	NA
26. Frother Agent Storage Tanks	NA
27. Alcohol Reagent Tanks	NA
28. Heating Fuel Oil Tank	NA
29. Diesel Fuel Oil Tanks	NA
30. Used Oil Tank	NA
31. Lube Oil Tote Tank	NA
Miscellaneous Sources	
32. Light-off Oil Storage Tanks	NA
33. Diesel Fuel Oil Tank	NA
34. Utility Building Equipment Oil Tanks	NA
35. Utility Building Antifreeze Tank	NA
36. Dirty and Clean Insulating Oil Tanks	NA
SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)	

DescriptionGenerally Applicable Regulation

- | | |
|--|----------------|
| 37. Dirty Oil Circuit Breaker Oil Tank | NA |
| 38. Kerosene Tank | NA |
| 39. Fire Pump Diesel Oil Tank | NA |
| 40. Emergency Diesel Water Pumps | 401 KAR 61:020 |
| 41. Solvent Degreasing Stations | NA |

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate matter, sulfur dioxide, and visible emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
3. Particulate matter emissions from limestone handling, GACT7 and GACT8, shall not exceed 25 tons in any twelve (12) consecutive months.

Compliance Demonstration Method:

Compliance will be assumed when bagfilters are operated continuously and maintained in accordance with manufacturer's recommendations.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey park Drive W. STE 700
Owensboro, KY 42303

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - d. If any additional applicable requirements of the Acid Rain Program become applicable to the source.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in the permit and
 - b. Non-applicable requirements expressly identified in this permit.
17. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of a required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
18. Pursuant to Agreed Order AO-89-41D, the permittee shall submit within 90 days of issuance of the proposed permit an alternate method of determining compliance with opacity requirements on Units #1 and 2.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points EQPT33 and EQPT34, in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (*test*) on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. ***These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test***
 6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
 7. Pursuant to Section VII 1.(2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.
- (e) Acid Rain Program Requirements
1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
 2. The source shall comply with all requirements and conditions of the Title IV, Acid Rain Permit (A-98-001) issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.
- (f) Emergency Provisions
1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.

SECTION G - GENERAL PROVISIONS (CONTINUED)

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None

SECTION J - ACID RAIN PERMIT

ACID RAIN PERMIT CONTENTS

- 1) Statement of Basis
- 2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- 4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application and the Phase II NO_x Compliance Plan.
- 5) Summary of Actions

➤ **Statement of Basis:**

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to Regulations 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and Federal Regulation 40 CFR Part 76.

PERMIT (Conditions)

Plant Name: Paradise Plant
Affected Unit: 1

➤ **SO₂ Allowance Allocations and NO_x Requirements for the affected unit:**

SO ₂ Allowances	Year				
	2004	2005	2006	2007	2008
Tables 2, 3 or 4 of 40 CFR Part 73	10,818*	10,818*	10,818*	10,818*	10,818*

NO _x Requirements	
NO_x Limits	<p>Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves a NO_x standard emissions limitation compliance plan for unit 1. The NO_x compliance plan is effective from January 1, 2004 through December 31, 2008. Under the NO_x compliance plan, annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.6(a)(2), of 0.86 lb/mmBTU for cyclone boilers.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>

* The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

PERMIT (Conditions)

Plant Name: Paradise Plant
Affected Unit: 2

➤ **SO₂ Allowance Allocations and NO_x Requirements for the affected unit:**

SO ₂ Allowances	Year				
	2004	2005	2006	2007	2008
Tables 2, 3 or 4 of 40 CFR Part 73	12,300*	12,300*	12,300*	12,300*	12,300*

NO _x Requirements	
NO_x Limits	<p>Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves a NO_x standard emissions limitation compliance plan for unit 2. The NO_x compliance plan is effective from January 1, 2004 through December 31, 2008. Under the NO_x compliance plan, annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.6(a)(2), of 0.86 lb/mmBTU for cyclone boilers.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>

*The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

PERMIT (Conditions)

Plant Name: Paradise Plant
Affected Unit: 3

➤ **SO₂ Allowance Allocations and NO_x Requirements for the affected unit:**

SO ₂ Allowances	Year				
	2004	2005	2006	2007	2008
Tables 2, 3 or 4 of 40 CFR Part 73	25,504*	25,504*	25,504*	25,504*	25,504*
Repowering plan allowances	NA	NA	NA	NA	NA

NO _x Requirements	
NO_x Limits	<p>Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves a NO_x standard emissions limitation compliance plan for unit 3. The NO_x compliance plan is effective from January 1, 2004 through December 31, 2008. Under the NO_x compliance plan, annual average NO_x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.6(a)(2), of 0.86 lb/mmBTU for cyclone boilers.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>

*The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

➤ **Comments, Notes, and Justifications:**

1. Affected units are three (3) coal fired cyclone type boilers.
2. The Phase II permit contained a revised Repowering Extension Plan for Unit 3. However, TVA subsequently decided not to pursue the repowering option and never activated the Repowering Extension Plan. Therefore, the Repowering Extension Plan has been removed from the permit, and the Phase II application has been revised to reflect this change.

➤ **Permit Application:**

The Phase II Permit Application and the Phase II NO_x Compliance Plan are both part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application and the Phase II NO_x Compliance Plan.

➤ **Summary of Actions:**

Previous Actions:

1. Draft Phase II Permit (# AR-96-18) including SO₂ compliance was issued for public comments on October 9, 1996.
2. Final Phase II Permit (# AR-96-18) including SO₂ compliance plan was issued on December 16, 1996.
3. Draft Phase II Permit (# A-98-001) was issued with the 1998 revised SO₂ allowance allocations and NO_x emission standards for public comment on November 19, 1998.
4. Final Phase II Permit (#A-98-001) was issued on February 26, 1999.

Present Action:

1. Draft Title V with Section J Acid Rain Permit has been proposed for public comment.

SECTION K – NO_x BUDGET PERMIT

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100, the Kentucky Environmental and Public Protection Cabinet issues this permit pursuant to 401 KAR 52:020 Title V permits, 401 KAR 51:160, NO_x requirements for large utility and industrial boilers, and 40 CFR 97, Subpart C.

2) NO_x Budget Permit Application, Form DEP 7007EE

The NO_x Budget Permit application for these electrical generating units was submitted to the Division and received on October 30, 2002. Requirements contained in that application are hereby incorporated into and made part of this NO_x Budget Permit. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3) Comments, notes, justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

Affected units are three (3) coal boilers. Each unit has a capacity to generate 25 megawatts or more of electricity, which is offered for sale. The units use coal and are used as base load electric generating units.

4) Summary of Actions

The NO_x Budget Permit is being issued as part of the initial Title V permit for this source. Public, affected state, and U.S. EPA review will follow procedures specified in 401 KAR 52:100.